



PTO/SB/08A (08-03)

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet

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of

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Complete if Known

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| Application Number | 10/648,945 |
| Filing Date | August 26, 2003 |
| First Named Inventor | Guillermo C. Bazan |
| Art Unit | 1637 |
| Examiner Name | Riley, Jezia |
| Attorney Docket Number | 51871-000006 |

| U. S. PATENT DOCUMENTS | | | | | |
|------------------------|--------------------------|--|--------------------------------|--|---|
| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number-Kind Code ² (if known) | | | |
| JR | 144 | US- 4,948,843 A | 08-14-1990 | Roberts et al. | |
| | 145 | US- 4,950,587 A | 08-21-1990 | Roberts et al. | |
| | 146 | US- 5,408,109 A | 04-18-1995 | Heeger et al. | |
| | 147 | US- 5,612,221 A | 03-18-1997 | Simons et al. | |
| | 148 | US- 5,869,350 A | 02-09-1999 | Heeger et al. | |
| | 149 | US- 5,881,083 A | 03-09-1999 | Diaz-Garcia et al. | |
| | 150 | US- 5,968,762 A | 10-19-1999 | Jadamec et al. | |
| | 151 | US- 5,990,479 A | 11-23-1999 | Weiss et al. | |
| | 152 | US- 6,280,933 B1 | 08-28-2001 | Glazer et al. | |
| | 153 | US- 6,534,329 B1 | 03-18-2003 | Heeger et al. | |
| | 154 | US- 6,743,640 B1 | 06-01-2004 | Whitten | |
| | 155 | US- 2002/0009728 A1 | 01-24-2002 | Bittner | |
| | 156 | US- 2002/0034747 A1 | 03-21-2002 | Bruchez | |
| | 157 | US- 2002/0150759 A1 | 10-17-2002 | Jones | |
| | 158 | US- 2002/0177136 A1 | 11-28-2002 | McBranch | |
| | 159 | US- 2003/0054413 A1 | 03-20-2003 | Kumaraswamy | |
| | 160 | US- 2004/0241768 A1 | 12-02-2004 | Whitten | |
| | 161 | US- 60/202,647 | 05-08-2000 | Whitten | |
| JR | 162 | US- 60/226,902 | 08-23-2000 | Whitten | |

| FOREIGN PATENT DOCUMENTS | | | | | |
|--------------------------|--------------------------|---|-----------------------------------|--|---|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear |
| | | Country Code ³ Number ⁴ Kind Code ⁵ (if known) | | | |
| JR | 163 | WO 99/35288 A1 | 07-15-1999 | Minnesota Mining and Manufacturing Company | |
| | 164 | WO 00/14278 A1 | 03-16-2000 | The Secretary of State for Defence | |
| | 165 | WO 00/66790 A1 | 11-09-2000 | The Regents of the University of California | |
| | 166 | WO 02/081735 A2 | 10-17-2002 | Infectio Diagnostic (I.D.I.) Inc. | |
| JR | 167 | WO 2004/001379 A2 | 12-31-2003 | The Regents of the University of California | |

Examiner
Signature

/Jezia Riley/

Date
Considered

10/29/2006

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Sheet 2

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| Filing Date | August 26, 2003 |
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| First Named Inventor | Guillermo C. Bazan |
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| Art Unit | 1637 |
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| Examiner Name | Riley, Jezia |
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| Attorney Docket Number | 51871-000006 |
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/Jezia Riley/

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| | | Examiner Name | Riley, Jezia |
| Sheet 3 of 7 | Attorney Docket Number | 51871-000006 | |

| NON PATENT LITERATURE DOCUMENTS | | | |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| JR | 174 | Wang et al., "Size-Specific Interactions Between Single- and Double-Stranded Oligonucleotides and Cationic Water-Soluble Oligofluorenes", Adv. Funct. Mater., June 2003, 13(6), 463-467. | |
| | 175 | Stork et al., "Energy Transfer in Mixtures of Water-Soluble Oligomers: Effect of Charge, Aggregation, and Surfactant Complexation", Adv. Mater., March 2002, 14(5), 361-366. | |
| | 176 | Leclerc, "Optical and Electrochemical Transducers Based on Functionalized Conjugated Polymers", Adv. Mater., 1999, 11(18), 1491-1498. | |
| | 177 | Balakin et al., "Conjugates of oligonucleotides with polyaromatic fluorophores as promising DNA probes", Biosensors & Bioelectronics, 1998, 13, 771-778. | |
| | 178 | Ho et al., "Colorimetric and Fluorometric Detection of Nucleic Acids Using Cationic Polythiophene Derivatives", Angew. Chem. Int. Ed., 2002, 41(9), 1548-1551. | |
| | 179 | McQuade et al., "Conjugated Polymer-Based Chemical Sensors", Chem. Rev., 2000, 100, 2537-2574. | |
| | 180 | Chen et al., "Highly sensitive biological and chemical sensors based on reversible fluorescence quenching in a conjugated polymer", PNAS, October 1999, 96(22), 12287-12292. | |
| | 181 | Liu et al., "Effect of Chromophore-Charge Distance in the Energy Transfer Properties of Water-Soluble Conjugated Oligomers", J. Am. Chem. Soc., 2003, 125, 6705-6714. | |
| | 182 | Gaylord et al., "DNA detection using water-soluble conjugated polymers and peptide nucleic acid probes", PNAS, August 2002, 99(17), 10954-10957. | |
| JR | 183 | Bronich et al., "Recognition of DNA Topology in Reactions between Plasmid DNA and Cationic Copolymers", J. Am. Chem. Soc., September 2000, 122(35), 8339-8343. | |

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| Examiner Signature | /Jezia Riley/ | Date Considered | 10/29/2006 |
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| | | Examiner Name | Riley, Jezia |
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| JR | 184 | Chen et al., "Tuning the Properties of Conjugated Polyelectrolytes through Surfactant Complexation", J. Am. Chem. Soc., 2000, 122, 9302-9303. | |
| | 185 | Gaylord et al., "Water-Soluble Conjugated Oligomers: Effect of Chain Length and Aggregation on Photoluminescence-Quenching Efficiencies", J. Am. Chem. Soc., 2001, 123, 6417-6418. | |
| | 186 | Hong et al., "Water-Soluble Oligomer Dimers Based on Paracyclophane: A New optical Platform for Fluorescent Sensor Applications", J. Am. Chem. Soc., 2002, 124, 11868-11869. | |
| | 187 | Gaylord et al., "DNA Hybridization Detection with Water-Soluble Conjugated Polymers and Chromophore-Labeled Single-Stranded DNA", J. Am. Chem. Soc., 2003, 125, 896-900. | |
| | 188 | Zhou et al., "Fluorescent Chemosensors Based on Energy Migration in Conjugated Polymers: The Molecular Wire Approach to Increased Sensitivity", J. Am. Chem. Soc., 1995, 117, 12593-12602. | |
| | 189 | Zhou et al., "Methodology for Enhancing the Sensitivity of Fluorescent Chemosensors: Energy Migration in Conjugated Polymers", J. Am. Chem. Soc., 1995, 117, 7017-7018. | |
| | 190 | Hawkins et al., "Incorporation of a fluorescent guanosine analog into oligonucleotides and its application to a real time assay for the HIV-1 Integrase 3'-processing reaction", Nucleic Acids Research, 1995, 23(15), 2872-2880. | |
| | 191 | Cardullo et al., "Detection of Nucleic Acid Hybridization by Nonradiative Fluorescence Resonance Energy Transfer", Proc. Natl. Acad. Sci. USA, December 1998, 85, 8790-8794. | |
| | 192 | Gallot et al., "Poly(L-lysine) containing azobenzene units in the side chains: influence of the degree of substitution on liquid crystalline structure and thermotropic behaviour", Liquid Crystals, 1997, 23(1), 137-146. | |
| JR | 193 | Wang et al., "Biosensors from conjugated polyelectrolyte complexes", PNAS, January 2002, 99(1), 49-53. | |

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| Sheet 5 | of 7 | Attorney Docket Number | 51871-000006 |

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| JR | 194 | Liu et al., "Methods for strand-specific DNA detection with cationic conjugation polymers suitable for incorporation into DNA chips and microarrays", PNAS Early Edition, December 2004, p. 1-5 | |
| | 195 | Vehse et al., "Light Amplification by Optical Excitation of a Chemical Defect in a Conjugated Polymer", Adv. Mater., June 2004, 16(12), 1001-1004. | |
| | 196 | Liu et al., "Shape-Adapable Water-Soluble Conjugated Polymers", J. Am. Chem. Soc., 2003, 125, 13306-13307. | |
| | 197 | Liu et al., "Interpolyelectrolyte Complexes of Conjugated Copolymers and DNA: Platforms for Multicolor Biosensors", J. Am. Chem. Soc., 2004, 126, 1942-1943. | |
| | 198 | Huang et al., "High-Efficiency, Environment-Friendly Electroluminescent Polymers with Stable High Work Function Metal as a Cathode: Green- and Yellow-Emitting Conjugated Polyfluorene Polyelectrolytes and Their Neutral Precursors", J. Am. Chem. Soc., 2004, 126, 9845-9853. | |
| | 199 | Service, "DNA Analysis: Microchip Arrays Put DNA on the Spot", The American Association for the Advancement of Science, October 1998, 282(5388), 396-399. | |
| | 200 | Southern, "DNA chips: analysing sequence by hybridization to oligonucleotides on a large scale", TIG, March 1996, 12(3), 110-115. | |
| | 201 | Epstein et al., "Microarray technology - enhanced versatility, persistent challenge", Current Opinion in Biotechnology, 2000, 11, 36-41. | |
| | 202 | Heeger et al., "Making Sense of polymer-based biosensors", PNAS, October 1999, 96(22), 12219-12221. | |
| JR | 203 | Patel et al., "Energy transfer analysis of Fos-Jun dimerization and DNA binding", Proc. Natl. Sci. USA, July 1994, 91, 7360-7364. | |

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| JR | 204 | Lohse et al., "Fluorescein-Conjugated Lysine Monomers for Solid Phase Synthesis of Fluorescents Peptides and PNA Oligomers", Bioconjugate Chem., 1997, 8, 503-509. | |
| | 205 | Smith et al., "The synthesis of oligonucleotides containing an aliphatic amino group at the 5' terminus: synthesis of fluorescent DNA primers for use in DNA sequence analysis", Nucleic Acids Research, 1985, 13(7) 2399-2412. | |
| | 206 | Wintermeyer et al., "Fluorescent Derivatives of Yeast tRNA(TM)", Eur. J. Biochem., 1979, 98, 465-475. | |
| | 207 | Lipshutz et al., "High density synthetic oligonucleotide arrays", Nature Genetics Supplement, January 1999, 21, 20-24. | |
| | 208 | Nilsson et al., "Chip solution detection of DNA hybridization using a luminescent zwitterionic polythiophene derivative", Nature Materials, June 2003, 2, 419-424 (Supplementary Information pp. 1-2). | |
| | 209 | Dore et al., "Fluorescent Polymeric Transducer for the Rapid, Simple, and Specific Detection of Nucleic Acids at the Zeptomole Level", J. Am. Chem. Soc., 2004, 126, 4240-4244. | |
| | 210 | Ranade et al., "High-Throughput Genotyping with Single Nucleotide Polymorphisms", Genome Research, 2001, 11, 1262-1268. | |
| | 211 | Schork et al., "Single nucleotide polymorphisms and the future of genetic epidemiology", Clin. Genet., 2000, 58, 250-264. | |
| | 212 | Wang et al., "Optically Amplified RNA-Protein Detection Methods Using Light-Harvesting Conjugated Polymers", Adv. Mater., September 2003, 15(17), 1425-1428. | |
| JR | 213 | Liu et al., "Homogeneous Fluorescents-Based DNA Detection with Water-Soluble Conjugated Polymers", Chem. Mater., 2004, 16, 4467-4476. | |

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| JR | 214 | Wolcott, "Advances in Nucleic Acid-Based Detection Methods", Clinical Microbiology Reviews, October 1992, 5(4), 370-386. | |
| | 215 | Umek et al., "Electronic Detection of Nucleic Acids, A Versatile Platform for Molecular Diagnostics", Journal of Molecular Diagnostics, May 2001, 3(2), 74-84. | |
| | 216 | Stevens et al., "Exciton dissociation mechanisms in the polymeric semiconductors poly(9,9-dioctylfluorene) and poly(9,9-dioctylfluorene-co-benzothiadiazole)", Physical Review B, April 2001, 63, 1-18. | |
| | 217 | Wang, "Survey and Summary From DNA biosensors to gene chips", Nucleic Acids Research, 2000, 28(16), 3011-3016. | |
| JR | 218 | Beier et al., "Versatile derivatisation of solid support media for covalent bonding on DNA-microchips", Nucleic Acids Research, 1999, 27(9), 1970-1977. | |
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Sheet 1 of 11

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| | |
|------------------------|--------------------|
| Application Number | 10/648,945 |
| Filing Date | August 26, 2003 |
| First Named Inventor | Guillermo C. Bazan |
| Art Unit | 1637 |
| Examiner Name | Riley, Jezia |
| Attorney Docket Number | 51871-000006 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published | T ² |
|-----------------------|--------------------------|---|----------------|
| | 1 | BALAKIN, K.V. et al. Conjugates of oligonucleotides with polyaromatic fluorophores as promising DNA probes¹. Biosensors and Bioelectronics (1998) 13:771-778. <i>Duplicate</i> | |
| JR | 2 | BARDEA, A. et al. Sensing and amplification of oligonucleotide-DNA interactions by means of impedance spectroscopy: a route to a Tay-Sachs sensor, <i>Chem. Commun.</i> (1999) 21-22. | |
| | 3 | BAUR, J.W., et al. Thin-Film Light-Emitting Devices Based on Sequentially Adsorbed Multilayers of Water-Soluble Poly (p-phenylene)s; <i>Advanced Materials</i> (1998) 10:17:1452-1455. | |
| | 4 | BEHR, J.P. Synthetic Gene-Transfer Vectors; <i>Acc. Chem. Res.</i> (1993) 26: 274-278. | |
| | 5 | BEHR, J.P. DNA Strongly Binds to Micelles and Vesicles Containing Lipopolyamines or Lipointercalants; <i>Tetrahedron Lett.</i> (1986) 27:48:5861-5864. | |
| | 6 | BENSON, S.C. et al. Heterodimeric DNA-binding dyes designed for energy transfer: synthesis and spectroscopic properties; <i>Nucleic Acids Res.</i> (1993) 21:24:5727-5735. | |
| | 7 | BETTS, L., et al. A Nucleic Acid Triple Helix Formed by a Peptide Nucleic Acid-DNA Complex; <i>Science</i> (1995) 270: 1838-1841. | |
| | 8 | BHATTACHARYA, S. and MANDAL, S.S. Interaction of surfactants with DNA. Role of hydrophobicity and surface charge on Intercalation and DNA melting; <i>Biochim. et Biophys. Acta.</i> (1997) 1323:29-44. | |
| | 9 | BHATTACHARYA, S. and MANDAL, S.S. Role of hydrophobic effect and surface charge in surfactant-DNA association; <i>Indian J. Biochem. & Biophys.</i> (1997) 34:11-17. | |
| | 10 | BIER, F.F. and KLEINJUNG, F. Feature-size limitations of microarray technology - a critical review; <i>Fresenius J. Anal. Chem.</i> (2001) 371:151-156. | |
| | 11 | BIRNBOIM, H.C. and JEVCAK, J.J. Fluorometric Method for Rapid Detection of DNA Strand Breaks in Human White Blood Cells Produced by Low Doses of Radiation; <i>Cancer Res.</i> (1981) 41:1889-1892. | |
| | 12 | BLESSING, T. et al. Monomolecular collapse of plasmid DNA into stable virus-like particles; <i>Proc. Natl. Acad. Sci. USA</i> (1998) 95:1427-1431. | |
| JR | 13 | BRONICH, T.K. et al. Recognition of DNA Topology in Reactions between Plasmid DNA and Cationic Copolymers; <i>J. Am. Chem. Soc.</i> (2000) 122:35:8339-8343. | |
| | 14 | CARDULLO, R.A. et al. Detection of nucleic acid hybridization by nonradiative fluorescence resonance energy transfer; <i>Proc. Natl. Acad. Sci. USA</i> (1986) 85:8790-8794. <i>Duplicate</i> | |

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| First Named Inventor | Guillermo C. Bazan |
| Art Unit | 1637 |
| Examiner Name | Riley, Jezia |
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|-----------------------|--------------------------|---|----------------|
| JR | 15 | CASTRO, A. and WILLIAMS, J.G.K. Single-molecule detection of specific nucleic acid sequences in unamplified genomic DNA; <i>Anal. Chem.</i> (1997) 69:19:3915-3920. | |
| | 16 | CHANDAR, P. et al. Fluorescence probe investigation of anionic polymer-cationic surfactant interactions; <i>Macromolecules</i> (1988) 21:950-953. | |
| | 17 | CHEHAB, F.F. and KAN, Y.W. Detection of specific DNA sequences by fluorescence amplification: A color complementation assay; <i>Proc. Natl. Acad. Sci. USA</i> (1989) 86:9178-9182. | |
| | 18 | CHEN, L. and FRANKEL, A.D. A peptide interaction in the major groove of RNA resembles protein interactions in the minor groove of DNA; <i>Proc. Natl. Acad. Sci. USA</i> (1995) 92:5077-5081. | |
| | 19 | CHEN, L. et al. Highly sensitive biological and chemical sensors based on reversible fluorescence quenching in a conjugated polymer; <i>Proc. Natl. Acad. Sci. USA</i> (1999) 96:22:12287-12292. | |
| | 20 | CHEN, W. et al. Using Ethidium Bromide to Probe the Interactions between DNA and Dendrimers; <i>Langmuir</i> (2000) 16:15-19. | |
| | 21 | DELLING, U. et al. The number of positively charged amino acids in the basic domain of Tat is critical for trans-activation and complex formation with TAR RNA; <i>Proc. Natl. Acad. Sci. USA</i> (1991) 88:6234-6238. | |
| | 22 | DEMIDOV, V.V. PNA and LNA throw light on DNA; <i>Trends in Biotechnology</i> (2003) 21:1:4-7. | |
| | 23 | DEMIDOV, V.V. et al. Stability of peptide nucleic acids in human serum and cellular extracts; <i>Biochem. Pharmacol.</i> (1994) 48:6:1310-1313. | |
| | 24 | DIDENKO, V.V. DNA Probes Using Fluorescence Resonance Energy Transfer (FRET): Designs and Applications; <i>BioTechniques</i> (2001) 31:5:1106-1121. | |
| | 25 | DOGARIU, A. et al. Time-resolved Förster energy transfer in polymer blends; <i>Synthetic Metals</i> (1999) 100:95-100. | |
| | 26 | DUFOURCQ, J. et al. Molecular assembling of DNA with amphipathic peptides; <i>FEBS Lett.</i> (1998) 421:7-11. | |
| | 27 | EASTMAN, S.J. et al. Biophysical characterization of cationic lipid: DNA complexes; <i>Biochim. et Biophys. Acta</i> (1997) 1325:41-62. | |
| JR | 28 | EGHOLM, M. et al. PNA hybridizes to complementary oligonucleotides obeying the Watson-Crick hydrogenbonding rules; <i>Nature</i> (1993) 365:566-568. | |

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| First Named Inventor | Guillermo C. Bazan |
| Art Unit | 1637 |
| Examiner Name | Riley, Jezia |
| Attorney Docket Number | 51871-000006 |

Sheet 3 of 11

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|-----------------------|--------------------------|---|----------------|
| JR | 29 | EGHOLM, M. et al. Recognition of Guanine and Adenine in DNA by Cytosine and Thymine Containing Peptide Nucleic Acids (PNA); <i>J. Am. Chem. Soc.</i> (1992) 114:9677-9678. | |
| | 30 | ENGLEBIENNE, P. Synthetic materials capable of reporting biomolecular recognition events by chromic transition; <i>J. Mater Chem.</i> (1999) 9:1043-1054. | |
| | 31 | ESKILSSON, K. et al. DNA-Surfactant Complexes at Solid Surfaces; <i>Langmuir</i> (2001) 17:1666-1669. | |
| | 32 | FELGNER, P.L. et al. Nomenclature for Synthetic Gene Delivery Systems; <i>Hum. Gene Ther.</i> (1997) 8:511-512. | |
| | 33 | FERGUSON, B.Q. and YANG, D.C.H. Localization of Noncovalently Bound Ethidium in Free and Methionyl-tRNA Synthetase Bound tRNA ^{Met} by Singlet-Singlet Energy Transfer; <i>Biochemistry</i> (1986) 25:5298-5304. | |
| | 34 | FERNANDEZ-SAIZ, M. et al. A Cationic Cyclophane That Forms a Base-Pair Open Complex with RNA Duplexes; <i>J. Am. Chem. Soc.</i> (1996) 118:4739-4745. | |
| | 35 | FRANKEL, A.D. Peptide models of the Tat-TAR protein-RNA interaction; <i>Prot. Sci.</i> (1992) 1:1539-1542. | |
| | 36 | FUTAMI, J. et al. Optimum Modification for the Highest Cytotoxicity of Cationized Ribonuclease; <i>J. Biochem.</i> (2002) 132:223-228. | |
| | 37 | GALLEGO, J. and VARANI, G. Targeting RNA with Small-Molecule Drugs: Therapeutic Promise and Chemical Challenges; <i>Acc. Chem. Res.</i> (2001) 34:10:836-843. | |
| | 38 | GALLO, R and MONTAGNIER, L. AIDS in 1988; <i>Sci. Am.</i> (1988) 259:4: 41-48. | |
| JR | 39 | GANACHAUD, F. et al. Adsorption of Single-Stranded DNA Fragments onto Cationic Aminated Latex Particles; <i>Langmuir</i> (1997) 13:701-707. | |
| | 40 | GAYLORD, B. S. et al. DNA detection using water-soluble conjugated polymers and peptide nucleic acid probes; <i>Proc. Natl. Acad. Sci. USA</i> (2002) 99:17:10954-10957. | |
| | 41 | GAYLORD, B.S. et al. Water-Soluble Conjugated Oligomers. Effect of Chain Length and Aggregation on Photoluminescence-Quenching Efficiencies; <i>J. Am. Chem. Soc.</i> (2001) 123:6417-6418. | |
| | 42 | GAYLORD, B.S. et al. DNA Hybridization Detection with Water-Soluble Conjugated Polymers and Chromophore-Labeled Single-Stranded DNA; <i>J. Am. Chem. Soc.</i> (2003) 125:896-900. | |

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| First Named Inventor | Guillermo C. Bazan |
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|--------------------|-----------------------|---|----------------|
| JR | 43 | GERSHON, H. et al. Mode of Formation and Structural Features of DNA-Cationic Liposome Complexes Used for Transfection; <i>Biochemistry</i> (1993) 32:7143-7151. | |
| | 44 | GIESEN, U. et al. A formula for thermal stability (T _m) prediction of PNA/DNA duplexes; <i>Nucleic Acids Res.</i> (1998) 26:21:5004-5006. | |
| | 45 | GÖSSL, L. et al. Molecular Structure of Single DNA Complexes with Positively Charged Dendronized Polymers; <i>J. Am. Chem. Soc.</i> (2002) 124:6860-6865. | G |
| | 46 | HAGE, D.S.. Immunoassays; <i>Anal. Chem.</i> (1999) 71:12:294R-304R. | |
| | 47 | HANVEY, J.C. et al. Antisense and Antigene Properties of Peptide Nucleic Acids; <i>Science</i> (1992) 258:1481-1485. | |
| JR | 48 | HARADA, A. and KATAOKA, K. Chain Length Recognition: Core-Shell Supramolecular Assembly from Oppositely Charged Block Copolymers; <i>Science</i> (1999) 283:65-67. | |
| | 49 | HO, H.A. et al. Colorimetric and Fluorometric Detection of Nucleic Acids Using Cationic Polythiophene Derivatives; <i>Angew. Chem. Int. Ed.</i> (2002) 41:9:1548-1551. | |
| JR | 50 | IZUMRUDOV, V.A. et al. The influence of chain length of a competitive polyanion and nature of monovalent counterions on the direction of the substitution reaction of polyelectrolyte complexes; <i>Makromol. Chem., Rapid Commun.</i> (1988) 9:7-12. | |
| | 51 | IZUMRUDOV, V.A. et al. Competitive Reactions in Solutions of DNA and Water-Soluble Interpolyelectrolyte Complexes; <i>Biopolymers</i> (1995) 35:523-531. | |
| | 52 | IZUMRUDOV, V.A. et al. Competitive Displacement of Ethidium Cations Intercalated in DNA by Polycations; <i>Dokl. Phys. Chem.</i> (1995) 342:Nos. 4-6: 150-153. | |
| | 53 | IZUMRUDOV, V.A. et al. Ethidium Bromide as a Promising Probe for Studying DNA Interaction with Cationic Amphiphiles and Stability of the Resulting Complexes; <i>Langmuir</i> (2002) 18:10348-10356. | |
| | 54 | IZUMRUDOV, V.A. et al. Controllable Stability of DNA-Containing Polyelectrolyte Complexes in Water-Salt Solutions; <i>Biopolymers.</i> (1999) 52:94-108. | |
| | 55 | IZUMRUDOV, V.A. and ZHIRYAKOVA, M.V. Stability of DNA-containing interpolyelectrolyte complexes in water-salt solutions; <i>Macromol. Chem. Phys.</i> (1999) 200:11:2533-2540. | |
| JR | 56 | JAIN, C. and BELASCO, J.G. Rapid Genetic Analysis of RNA-Protein Interactions by Translational Repression in <i>Escherichia coli</i> ; <i>Methods Enzymol.</i> (2000) 318:309-332. | |

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|-----------------------|--------------------------|---|----------------|
| JR | 57 | JENKINS, Y. and BARTON, J.K. A Sequence-Specific Molecular Light Switch: Tethering of an Oligonucleotide to a Dipyridophenazine Complex of Ruthenium (II); <i>J. Am. Chem. Soc.</i> (1992) 114:8736-8738. | |
| | 58 | JOHANSSON, M.K. et al. Intramolecular Dimers: A New Strategy to Fluorescence Quenching in Dual-Labeled Oligonucleotide Probes; <i>J. Am. Chem. Soc.</i> (2002) 124:6950-6956. | |
| | 59 | KABANOV, A.V. et al. DNA Interpolyelectrolyte Complexes as a Tool for Efficient Cell Transformation; <i>Biopolymers</i> . (1991) 31:1437-1443. | |
| | 60 | KABANOV, A.V. and KABANOV, V.A. DNA Complexes with Polycations for the Delivery of Genetic Material into Cells; <i>Bioconjugate Chem.</i> (1995) 6:7-20. | |
| | 61 | KABANOV, V.A. et al. Cooperative Interpolyelectrolyte Reactions; <i>Makromol. Chem. Suppl.</i> (1985) 13:137-155. | |
| | 62 | KARN, J. et al. HIV A Practical Approach; RNA binding assays for the regulatory proteins Tat and Rev; <i>IRL Press, New York</i> ; (1995) 9:147-165. | |
| | 63 | KATAYOSE, S. and KATAOKA, K. Water-Soluble Polyion Complex Associates of DNA and Poly(ethylene glycol)-Poly(L-lysine) Block Copolymer; <i>Bioconjugate Chem.</i> (1997) 8:702-707. | |
| | 64 | KIRCHEIS, R. et al. Tumor targeting with surface-shielded ligand-polycation DNA complexes; <i>J. Controlled Release</i> ; (2001) 72:165-170. | |
| | 65 | KIRSH, Yu. E. et al. Comparison of Properties of an Oxime-Bound Partially Quaternized Poly-4-Vinylpyridine and a Monomer Analogous Oxime; <i>Eur. Polym. J.</i> (1974) 10:393-399. | |
| | 66 | KNEMEYER, J. et al. Probes for Detection of Specific DNA... <i>Anal. Chem.</i> (2000) 72:3717- <u>3724</u> | |
| JR | 67 | KWON, I.C. et al. Electrically Erodible polymer gel for controlled release of drugs; <i>Nature</i> (1991) 354:291-293. | |
| | 68 | LECLERC M. Optical and Electrochemical Transducers Based on Functionalized Conjugated Polymers; Adv Mater (1999) 11:10:1491-1498 <i>Duplicate</i> | |
| JR | 69 | LEE, M.A. et al. ResonSense®: simple linear fluorescent probes for quantitative homogeneous rapid polymerase chain reaction; <i>Anal. Chim. Acta</i> (2002) 457:61-70. | |
| JR | 70 | LE-PECQ, J.B. and PAOLETTI, C. A Fluorescent Complex between Ethidium Bromide and Nucleic Acids; <i>J. Mol Biol.</i> (1967) 27:87-106. | |

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| JR | 71 | LEULLIOT, N. and VARANI, G. Current Topics in RNA-Protein Recognition: Control of Specificity and Biological Function through Induced Fit and Conformational Capture; <i>Biochemistry</i> (2001) 40:27:7947-7956. | |
| | 72 | LIU, B. et al. Effect of Chromophore-Charge Distance on the Energy Transfer Properties of Water-Soluble Conjugated Oligomers; <i>J. Am. Chem. Soc.</i> (2003) 125:6705-6714. | |
| | 73 | MAKINO, S. et al. Molecular Characterization and Protein Analysis of the cap Region, Which is Essential for Encapsulation in <i>Bacillus anthracis</i> ; <i>J. Bacteriol.</i> (1989) 171:2:722-730. | |
| | 74 | MANNING, G.S. Thermodynamic Stability Theory for DNA Doughnut Shapes Induced by Charge Neutralization; <i>Biopolymers</i> . (1980) 19:37-59. | |
| | 75 | MANNING, G.S. The Possibility of Intrinsic Local Curvature in DNA Toroids; <i>Biopolymers</i> . (1981) 20:1261-1270. | |
| | 76 | MANNING, G.S. The molecular theory of polyelectrolyte solutions with applications to the electrostatic properties of polynucleotides; <i>Qrtly Review of Biophysics</i> . (1978) v.11: 179-246. | |
| | 77 | MARUYAMA, A. et al. Characterization of Interpolyelectrolyte Complexes between Double-Stranded DNA and Polylysine Comb-Type Copolymers Having Hydrophilic Side Chains; <i>Bioconjugate Chem.</i> (1998) 9:292-299. | |
| | 78 | MATSUMOTO, C; et al. High-Throughput Screening Utilizing Intramolecular Fluorescence Resonance Energy Transfer for the Discovery of the Molecules that Bind HIV-1 TAR RNA Specifically; <i>Bioorg. Med. Chem. Lett.</i> (2000) 10:1857-1861. | |
| JR | 79 | MCLOUGHLIN, D.M. et al. A simple and effective separation and purification procedure for DNA fragments using Dodecyltrimethylammonium bromide; <i>Bioseparation</i> . (2001) 9:307-313. | |
| | 80 | MCQUADE, D.T. et al. Conjugated Polymer-Based Chemical Sensors; <i>Chem. Rev.</i> (2000) 100:2537-2574. Dupliant | |
| JR | 81 | MCQUADE, D.T. et al. Signal amplification of a "Turn-On" Sensor: Harvesting the Light Captured by a Conjugated Polymer; <i>J. Am. Chem. Soc.</i> (2000) 122:12389-12390. | |
| | 82 | MEL'NIKOV, S.M. et al. Discrete Coil - Globule Transition of Large DNA Induced by Cationic Surfactant; <i>J. Am. Chem. Soc.</i> (1995) 117:2401-2408. | |
| | 83 | MERGNY, J.L. et al. Fluorescence Energy Transfer between Two Triple Helix-Forming Oligonucleotides Bound to Duplex DNA; <i>Biochemistry</i> . (1994) 33:15321-15328. | |
| JR | 84 | MIAO, Y.J. et al. Photophysics of Poly(paracyclophe-1-ene) and Derivatives: Evidence for Intrachain Energy Transfer and Chromophore Aggregation; <i>J. Am. Chem. Soc.</i> (1995) 117:11407-11420. | |

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| | |
|------------------------|--------------------|
| Application Number | 10/648,945 |
| Filing Date | August 26, 2003 |
| First Named Inventor | Guillermo C. Bazan |
| Art Unit | 1637 |
| Examiner Name | Riley, Jezia |
| Attorney Docket Number | 51871-000006 |

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|-----------------------|--------------------------|---|----------------|
| JR | 85 | MILLER, I.R. and BACH, D. Interaction of DNA with Heavy Metal Ions and Polybases: Cooperative Phenomena; <i>Biopolymers</i> . (1968) 6:169-179. | |
| | 86 | MINEHAN, D.S. et al. Kinetics of DNA Binding to Electrically Conducting Polypyrrole Films; <i>Macromolecules</i> . (1994) 27:777-783. | |
| | 87 | MORGAN, A.R. and PULLEYBLANK, D.E. Native and Denatured DNA, Cross-Linked and Palindromic DNA and Circular Covalently-Closed DNA Analysed by a Sensitive Fluorometric Procedure; <i>Biochem. Biophys. Res. Commun.</i> (1974) 61:2:396-403. | |
| | 88 | NIELSEN, P.E. Applications of peptide nucleic acids, <i>Analytical biotechnology</i> . (1999) 10:71-75. | |
| | 89 | NGUYEN, H-K, et al. Nonviral Transfer Technology: Evaluation of polyether-polyethyleneimine graft copolymers as gene transfer agents; <i>Gene Ther.</i> (2000) 7:126-138. | |
| | 90 | NISHANIAN, P. et al. A Simple Method for Improved Assay Demonstrates that HIV p24 Antigen is Present as Immune Complexes in Most Sera from HIV-Infected Individuals; <i>J. Infect. Dis.</i> (1990) 162:21-28. | |
| | 91 | NUOVO, G.J. <i>In Situ</i> Localization of PCR-Amplified DNA and cDNA; <i>Methods Mol. Bio.</i> (2000) 123:217-238. | |
| | 92 | OLINS, D.E. et al. Model Nucleoprotein Complexes: Studies on the Interaction of Cationic Homopolypeptides with DNA; <i>J. Mol. Biol.</i> (1967) 24:157-176. | |
| | 93 | PASTERNAK, R.F. et al. Long-Range Fluorescence Quenching of Ethidium Ion by Cationic Porphyrins in the Presence of DNA; <i>J. Am. Chem. Soc.</i> (1991) 113:6835-6840. | |
| | 94 | PATOLSKY, F. et al. Amplified DNA Detection by Electrogenated Biochemiluminescence and by the Catalyzed Precipitation of an Insoluble Product on Electrodes in the Presence of the Doxorubicin Intercalator; <i>Angew. Chem. Int. Ed.</i> (2002) 41:18:3398-3402. | |
| JR | 95 | PATOLSKY, F. et al. Electronic Transduction of DNA Sensing Processes on Surfaces: Amplification of DNA Detection and Analysis of Single-Base Mismatches by Tagged Liposomes; <i>J. Am Chem. Soc.</i> (2001) 123:5194-5205. | |

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|------------------------|--------------------|
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| Filing Date | August 26, 2003 |
| First Named Inventor | Guillermo C. Bazan |
| Art Unit | 1637 |
| Examiner Name | Riley, Jezia |
| Attorney Docket Number | 51871-000006 |

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|--------------------------|--------------------------|---|----------------|
| missing JR | 96 | PETERLINZ, K.P. et al. Observation of Hybridization and Dehybridization of Thiol-Tethered DNA using Two-Color Surface Plasmon Resonance Spectroscopy; <i>J. Am. Chem. Soc.</i> (1997) 119:3401-3402. | |
| | 97 | PETTY, J.T. et al. Thermodynamic Characterization of the Association of Cyanine Dyes with DNA; <i>J. Phys. Chem. B.</i> (2000) 104:7221-7227. | |
| | 98 | PILIPENKO, E.V. et al. A cell cycle-dependent protein serves as a template-specific translation initiation factor; <i>Genes & Dev.</i> (2000) 14:2028-2045. | |
| | 99 | PINTO, M.R. and SCHANZE, K.S. Conjugated Polyelectrolytes: Synthesis and Applications; <i>Synthesis.</i> (2002) 9:1293-1309. | |
| | 100 | PLANK, C. et al. Branched Cationic Peptides for Gene Delivery: Role of Type and Number of Cationic Residues in Formation and <i>in Vitro</i> Activity of DNA Polyplexes; <i>Hum. Gene Ther.</i> (1999) 10:319-332. | |
| | 101 | PORTELA, A. and DIGARD, P. The influenza virus nucleoprotein: a multifunctional RNA-binding protein pivotal to virus replication; <i>J. Gen. Virol.</i> (2002) 83:723-734. | |
| | 102 | PUGLISI, J.D. et al. Conformation of the TAR RNA-Arginine Complex by NMR Spectroscopy; <i>Science.</i> (1992) 257:76-80. | |
| | 103 | PULLMAN, B. et al. Two Aspects of DNA Polymorphism and Microheterogeneity: Molecular Electrostatic Potential and Steric Accessibility; <i>J. Biochem.</i> (1982) 124:229-238. | |
| | 104 | RICHTER, S. et al. Specific HIV-1 TAR RNA Loop Sequence and Functional Groups are Required for Human Cyclin T1-Tat-TAR Ternary Complex Formation; <i>Biochemistry.</i> (2002) 41:6391-6397. | |
| | 105 | SAGHATELIAN, A. et al. DNA Detection and Signal Amplification via an Engineered Allosteric Enzyme; <i>J. Am. Chem. Soc.</i> (2003) 125:344-345. | |
| | 106 | SAIKI, R.K. et al. Enzymatic Amplification of β -Globin Genomic Sequences and Restriction Site Analysis for Diagnosis of Sickle Cell Enemia; <i>Science.</i> (1985) 230:1350-1354. | |
| JR | 107 | SCHORK, N.J. et al. Single nucleotide polymorphisms and the future of genetic epidemiology; <i>Clin. Genet.</i> (2000) 58:250-264. | |

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| Application Number | 10/648,945 |
| Filing Date | August 26, 2003 |
| First Named Inventor | Guillermo C. Bazan |
| Art Unit | 1637 |
| Examiner Name | Riley, Jezia |
| Attorney Docket Number | 51871-000006 |

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|-----------------------|--------------------------|---|----------------|
| JR | 108 | SEYMOUR, L.W. et al. Cationic block copolymers as self-assembling vectors for gene delivery; <i>Self-assembling Complexes for Gene Delivery</i> ; (1998) 11:219-239. | |
| | 109 | SHINOZUKA, K. et al. A Novel Multifunctionality Labelled DNA Probe Bearing an Intercalator and a Fluorophore; <i>J. Chem. Soc., Chem. Commun.</i> (1994) 1377-1378. | |
| | 110 | DE SMEDT, S.C. et al. Cationic Polymer Based Gene Delivery Systems; <i>Pharm. Res.</i> (2000) 17:2:113-126. | |
| | 111 | SMITH, J.O. et al. Molecular Recognition of PNA-Containing Hybrids: Spontaneous Assembly of Helical Cyanine Dye Aggregates on PNA Templates; <i>J. Am. Chem. Soc.</i> (1999) 121:2686-2695. | |
| | 112 | SMITH, P. et al. Surfactant structure around DNA in aqueous solution; <i>Phys. Chem. Chem. Phys.</i> (2000) 2:1305-1310. | |
| | 113 | STENDER, H. et al. PNA for rapid microbiology; <i>J. Microbiological Methods.</i> (2002) 48:1-17. | |
| | 114 | STORK, M. et al. Energy Transfer in Mixtures of Water-Soluble Oligomers: Effect of Charge, Aggregation, and Surfactant Complexation; <i>Adv. Mater.</i> (2002) 14:5:361-366. | |
| | 115 | SU, X et al. Au nanoparticle- and silver-enhancement reaction-amplified microgravimetric biosensor; <i>Chem. Commun.</i> (2001) 755-756. | |
| | 116 | SULLENGER, B.A. and GILBOA, E. Emerging clinical applications of RNA; <i>Nature.</i> (2002) 418:252-258. | |
| | 117 | TAKAKUSA, H. et al. Design and Synthesis of an Enzyme-Cleavable Sensor Molecule for Phosphodiesterase Activity Based on Fluorescence Resonance Energy Transfer; <i>J. Am. Chem. Soc.</i> (2002) 124:8:1653-1657. | |
| | 118 | TAMILARASU, N. et al. A New Strategy for Site-Specific Protein Modification: Analysis of a Tat Peptide-TAR RNA Interaction; <i>Bioconjugate Chem.</i> (2001) 12:2:135-138. | |
| | 119 | TANG, M.X. and SZOKA, F.C. The influence of polymer structure on the interactions of cationic polymers with DNA and morphology of the resulting complexes; <i>Gene Ther.</i> (1997) 4:823-832. | |
| | 120 | DEMERS, J. et al. Thermal Desorption; J. Am. Chem. Soc. (2002) 124: 11248-11249 | |
| JR | 121 | TATON, T.A. et al. Scanometric DNA Array Detection with Nanoparticle Probes; <i>Science.</i> (2000) 289:1757-1760. | |

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| Application Number | 10/648,945 |
| Filing Date | August 26, 2003 |
| First Named Inventor | Guillermo C. Bazan |
| Art Unit | 1637 |
| Examiner Name | Riley, Jezia |
| Attorney Docket Number | 51871-000006 |

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|-----------------------|--------------------------|---|----------------|
| JR | 122 | TATON, T.A. et al. Two-Color Labeling of Oligonucleotide Arrays via Size-Selective Scattering of Nanoparticle Probes; <i>J. Am. Chem. Soc.</i> (2001) 123:5164-5165. | |
| | 123 | TOMAC, S. et al. Ionic Effects on the Stability and Conformation of Peptide Nucleic Acid Complexes; <i>J. Am. Chem. Soc.</i> (1996) 118:5544-5552. | |
| | 124 | TRASER, S. et al. Syntheses and solution properties of water-soluble poly(p-phenylene)s bearing oligo(ethylene oxide) and trialkylamino side groups; <i>Macromolecules</i> . (2002) 35:1-39. | |
| | 125 | UMEK, R.M. et al. Electronic Detection of Nucleic Acids - A Versatile Platform for Molecular Diagnostics; <i>J. Mol. Diag.</i> (2001) 3:2:74-84. | |
| | 126 | VAISHNAV, Y.N. and WONG-STAL, F. The Biochemistry of Aids; <i>Ann. Rev. Biochem.</i> (1991) 60:577-630. | |
| | 127 | VARANI, G. RNA-Protein Intermolecular Recognition; <i>Acc. Chem. Res.</i> (1997) 30:5:189-195. | |
| | 128 | VINOGRADOV, S.V. et al. Self-Assembly of Polyamine-Poly(ethylene glycol) Copolymers with Phosphorothioate Oligonucleotides; <i>Bioconjugate Chem.</i> (1998) 9:805-812. | |
| | 129 | WANG, J. et al. Photoluminescence of Water-Soluble Conjugated Polymers: Origin of Enhanced Quenching by Charge Transfer; <i>Macromolecules</i> . (2000) 33:5153-5158. | |
| | 130 | WANG, J. et al. DNA Electrochemical Biosensor for the Detection of Short DNA Sequences Related to the Human Immunodeficiency Virus; <i>Anal. Chem.</i> (1996) 68:15:2629-2634. | |
| JR | 131 | ISOLA, N.R. et al. Surface-Enhanced Raman Gene Probe for HIV Detection; <i>Anal. Chem.</i> (1998) 70:1352-1356. | |
| | 132 | WANG, J. Survey and Summary From DNA biosensors to gene chips; <i>Nucleic Acid Res.</i> (2000) 28:16:3011-3016. | |
| JR | 133 | WANG, J. et al. Dendritic Nucleic Acid Probes for DNA Biosensors; <i>J. Am. Chem. Soc.</i> (1998) 120:8281-8282. | |
| | 134 | WANG, J. et al. Synthesis of AB(BA), ABA and BAB Block Copolymers of <i>tert</i> -Butyl Methacrylate (A) and Ethylene Oxide (B); <i>J. Polym. Sci., Part A: Polym. Chem.</i> (1992) 30:2251-2261. | |
| | 135 | WANG, Y. et al. Interaction of DNA with Cationic Micelles: Effects of Micelle Surface Charge Density, Micelle Shape, and Ionic Strength on Complexation and DNA Collapse; <i>Langmuir</i> . (2001) 17:1670-1673. | |
| | 136 | WARING, M. J. Complex Formation between Ethidium Bromide and Nucleic Acids; <i>J. Mol. Biol.</i> (1965) 13:269-282. | |
| JR | 137 | WEEKS, K.M. et al. Fragments of the HIV-1 Tat Protein Specifically Bind TAR RNA; <i>Science</i> . (1990) 249:1281-1285. | |

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|-----------------------|--------------------------|---|----------------|
| JR | 138 | WHITCOMBE, D. et al. Detection of PCR products using self-probing amplicons and fluorescence; <i>Nat. Biotechnol.</i> (1999) 17:804-807. | |
| | 139 | WOLFERT, M.A. et al. Polyelectrolyte Vectors for Gene Delivery: Influence of Cationic Polymer on Biophysical Properties of Complexes Formed with DNA; <i>Bioconjugate Chem.</i> (1999) 10:993-1004. | |
| | 140 | WYMAN, T.B. et al. Design, Synthesis, and Characterization of a Cationic Peptide that Binds to Nucleic Acids and Permeabilizes Bilayers; <i>Biochemistry.</i> (1997) 36:3008-3017. | |
| | 141 | XU, X.H. and BARD, A.J. Immobilization and Hybridization of DNA on an Aluminum(III) Alkanebisphosphonate Thin Film with Electrogenated Chemiluminescent Detection; <i>J. Am. Chem. Soc.</i> (1995) 117:2627-2631. | |
| | 142 | YANG, J.S. and SWAGER, T.M. Fluorescent Porous Polymer Films as TNT Chemosensors: Electronic and Structural Effects; <i>J. Am. Chem. Soc.</i> (1998) 120:11864-11873. | |
| JR | 143 | JUNHUI, Z. et al. DNA Based Biosensors; <i>Biotechnol. Adv.</i> (1997) 15:43-58. | |
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